BMP
IMPROVE GROUNDS MAINTENANCE PRACTICES

Background:

Daily operations include landscaping, leaf and brush removal, pesticide and fertilizer application, turf maintenance, lawn trimming and mowing.

Recommendations:

Facilities should consider implementing the following pollution prevention activities to reduce the impacts associated with grounds maintenance activities:

Reduce/Eliminate Chemical Use

The facility should evaluate current procedures to reduce or eliminate the use of chemical pesticides and herbicides wherever possible. The negative long-term effects of the applications of these chemicals on the environment have been well-documented. In addition, improper use and mismanagement of chemical pesticides can result in human health concerns. Over-mixing and over-application of landscaping chemicals leads to the generation of unnecessary waste and environmental degradation. Application near environmentally sensitive areas such as wetlands and tidal basins should be avoided.

Practice Environmentally Sound Pesticide Management

The facility should consider the following suggestions for pesticide use:

* Use pesticides with low mobility, high adsorption, and low persistence.
* Train employees in proper pesticide preparation, application, and safe handling procedures to maximize product effectiveness and reduce the risk of accidental spills.
* Use proper lawn care product application equipment and techniques to minimize excessive spraying.
* Practice Integrated Pest Management (IPM) to minimize use of pesticides by utilizing organic equivalents, beneficial insects and pest tolerant plant species.
* Practice strict inventory control to prevent material expiration.

Avoid Unnecessary Pesticide Use

Spot application of pesticide ensures that the smallest amount of chemical is applied to the ground and that the chemical is applied only in areas where it is needed. This reduces contamination of surrounding soil and local groundwater supplies. Timely application ensures that applied chemicals do the most good when application is needed. This includes applying chemicals at times when they are most likely to be absorbed by the target species and not spraying in windy conditions or immediately before predicted precipitation events, which could blow or wash the applied chemical into the surrounding environment.

Employ Environmentally Sound Fertilizer Management

The facility should consider developing and implementing a comprehensive nutrient management plan. Avoid applying excess fertilizer by using the rates that are recommended for the product.

Understand the needs and growth requirements of the plants, and use the minimum amount of fertilizer necessary to meet the plant needs.

Improve Mowing Practices

The facility should set the mower height so that no more than 1/3 of the lawn height (no more than 1 inch total) is removed with each mowing. Also, keep mower blades sharp and leave grass clippings in place after mowing.

Compost Yard Waste

Composted yard waste can be substituted for organic matter such as mulch and topsoil, normally purchased for grounds maintenance.

Develop Standard Operating Procedures (SOPs)

The facility should develop SOPs and other outreach materials for contractors and/or staff that are involved in grounds maintenance activities. SOPs and other materials should describe and promote environmentally sound approaches to landscaping.

Benefits:

Implementing a grounds maintenance waste minimization program will help facilities reduce total solid waste disposal costs by decreasing the waste stream. Furthermore, the program minimizes the hazardous waste stream by reducing potentially toxic fertilizer, pesticide, and herbicide use. In turn, potential hazardous waste disposal costs will be decreased. Establishing this program will also decrease water usage, energy usage, and labor costs by decreasing the amount of water necessary for upkeep, equipment use, and manpower hours.